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### NOTICE OF ALLOWANCE AND FEE(S) DUE

1933 7590 09/23/2010

HOLTZ, HOLTZ, GOODMAN & CHICK PC 220 Fifth Avenue

16TH Floor

NEW YORK, NY 10001-7708

EXAMINER CHEN, XIAOLIANG

ART UNIT PAPER NUMBER

2841 DATE MAILED: 09/23/2010

APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET N	IO. CONFIRMATION NO.

TITLE OF INVENTION: CIRCUIT BOARD, ITS MANUFACTURING METHOD, AND JOINT BOX USING CIRCUIT BOARD

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	12/23/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

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B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and I/2 the ISSUE FIEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

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appropriate. All further indicated unless correcte maintenance fee notifical	correspondence including ad below or directed off	or transmitting the ISSU ig the Patent, advance of nerwise in Block 1, by (a	THE BLE and PUBLICATI rders and notification of n a) specifying a new corres	ON FEE (if require naintenance fees will pondence address; a	d). Blocks I through 5 l be mailed to the curren nd/or (b) indicating a sep	should be completed where t correspondence address as sarate "FEE ADDRESS" for	
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.			
220 Fifth Avenu 16TH Floor	ΓZ, GOODMAN e	<sup>(2010</sup> & CHICK PC		Certif	icate of Mailing or Tran		
NEW YORK, N	Y 10001-7708					(Depositor's name)	
						(Signature)	
						(Date)	
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR	Α	TTORNEY DOCKET NO.	CONFIRMATION NO.	
10/593,796	02/02/2007		Tsugio Ambo		06645/LH	4463	
			METHOD, AND JOINT B			T	
APPLN, TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE I			
nonprovisional	NO	\$1510	\$300	\$0	\$1810	12/23/2010	
EXAM	INER	ART UNIT	CLASS-SUBCLASS				
CHEN, XL		284I	174-261000				
L Change of correspondence address or indication of "Fee Address" (S. CRI 1.86).  Change of correspondence address (or Change of Correspondence Address (or Change of Correspondence Address form PTOSB/1/22) attached.  The Address Indication (or "Fee Address" Indication form PTOSB/1/2 for more recent) attached. Use of a Custome Number is recupited.			or agents OR, alternative (2) the name of a single registered attorney or a 2 registered patent attornisted, no name will be	nes of up to 3 registered patent attorneys []  R, alternatively,  e of a single firm (having as a member a tot concern or agent to the tot up to patent attorneys or agents. If no name is me, will be printed.  3			
PLEASE NOTE: Uni recordation as set forti (A) NAME OF ASSIG	ess an assignee is ident h in 37 CFR 3.11. Comp GNEE	ified below, no assignee pletion of this form is NO	(B) RESIDENCE: (CITY	atent. If an assignee assignment. and STATE OR CO	UNTRY)	document has been filed for	
4a. The following fee(s):  ☐ Issue Fee ☐ Publication Fee (N ☐ Advance Order - 4	o small entity discount j		b. Payment of Fee(s): (Plea A check is enclosed. Payment by credit can The Director is hereby overpayment, to Depo	d. Form PTO-2038 is	s attached.	shown above) eficiency, or credit any an extra copy of this form).	
	s SMALL ENTITY state	as. See 37 CFR 1.27.	☐ b. Applicant is no long				
NOTE: The Issue Fee and interest as shown by the i	d Publication Fee (if req records of the United Sta	uired) will not be accepte ites Patent and Trademark	d from anyone other than the Office.	he applicant; a registe	ered attorney or agent; or t	he assignee or other party in	
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PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.



# UNITED STATES PATENT AND TRADEMARK OFFICE

#### UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/593,796	02/02/2007	Tsugio Ambo	06645/LH	4463	
1933 75	90 09/23/2010		EXAM	IINER	
HOLTZ, HOLTZ, GOODMAN & CHICK PC			CHEN, XIAOLIANG		
220 Fifth Avenue			ART UNIT	PAPER NUMBER	
16TH Floor NEW YORK, NY 10001-7708			2841		
NEW TORK, NT	10001-7700		DATE MAIL ED: 00/23/201	0	

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 531 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 531 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

# Notice of Allowability

Application No.	Applicant(s)	
10/593,796	AMBO ET AL.	
Examiner	Art Unit	
YIAOLIANG CHEN	2841	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address-All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included
herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS
NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative
of the Office or upon petition by the applicant. See 37 CFR 1331 and MPEP 1308.

- 1. This communication is responsive to 09-13-10.
- The allowed claim(s) is/are 30-33.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All b) Some\* c) None of the:
    - 1. A Certified copies of the priority documents have been received.
    - 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_
    - Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- 5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    1) ☐ hereto or 2) ☐ to Paper No./Mail Date
  - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

 DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1. Notice of References Cited (PTO-892)
- Notice of Draftperson's Patent Drawing Review (PTO-946).
- Information Disclosure Statements (PTO/SB/08), Pacer No./Mail Date
- Examiner's Comment Regarding Requirement for Deposit of Biological Material
- Notice of Informal Patent Application
   Interview Summery (PTO-413)
   Paper No./Mail Date
- 7. Examiner's Amendment/Comment

Examiner's Statement of Reasons for Allowance

9. ☐ Other .

/Xiaoliang Chen/ Examiner, Art Unit 2841

# DETAILED ACTION

# Amendment

- Acknowledgement is made of Amendment filed 09-13-10.
- Claims 30 and 31 are amended.
- Claims 1-29 are canceled.

# Allowable Subject Matter

- Claims 30-33 are allowed.
- The following is a statement of reasons for the indication of allowable subject matter:

Claims 30 and 32 are allowable because the prior art of record neither anticipates nor renders obvious the limitations of the base claim 30 in combination as claimed, including:

wherein said insertion terminals are secured to at least one block body comprising electrically insulating synthetic resin by fixing middle portions of the insertion terminals between the inserting ends and connecting ends to fitting holes formed in said block body, and wherein said block body is placed on one surface of the stack of circuit boards to simultaneously insert said inserting ends of the insertion terminals into said terminal receiving holes formed in the circuit boards.

Claims 31 and 33 are allowable because the prior art of record neither anticipates nor renders obvious the limitations of the base claim 31 in combination as claimed, including:

wherein said insertion terminals are secured to at least one block body comprising electrically insulating synthetic resin by fixing middle portions of the insertion terminals between the inserting ends and connecting ends to fitting holes formed in said block body, and wherein said block body is placed on one surface of the stack of circuit boards to simultaneously insert said inserting ends of the insertion terminals into said terminal receiving holes formed in the circuit boards.

After carefully review the specification and the claims in the application and art search, considering what is claimed as a whole that the aforementioned limitations are believed to render said claims 30, 31 and all claims dependent thereof patentable over art of record.

6. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

# Conclusion

 Any inquiry concerning this communication or earlier communications from the examiner should be directed to XIAOLIANG CHEN whose telephone number is Application/Control Number: 10/593,796

Art Unit: 2841

(571)272-9079. The examiner can normally be reached on 8:00-5:00 (EST), Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jinhee Lee can be reached on 571-272-1977. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Xiaoliang Chen Examiner Art Unit 2841

/Xiaoliang Chen/ Examiner, Art Unit 2841